

Fig.1

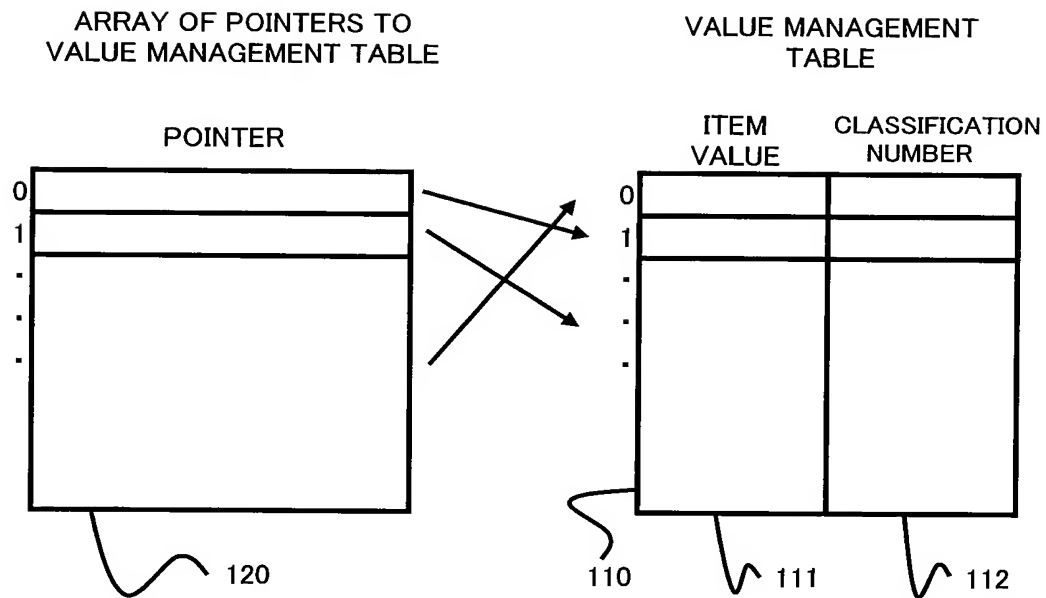


Fig.2

ARRAY OF POINTERS TO
VALUE MANAGEMENT TABLE

VALUE MANAGEMENT
TABLE

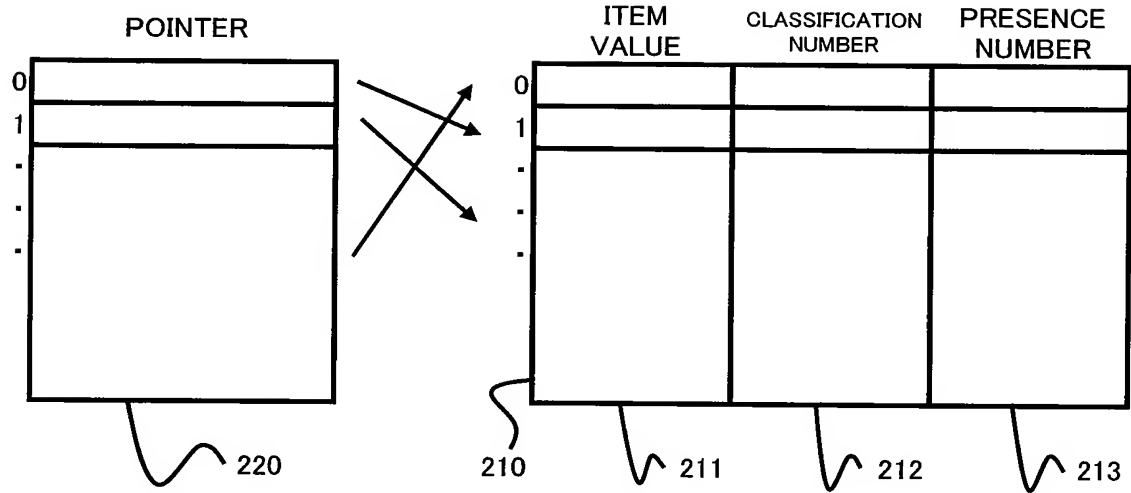


Fig.3

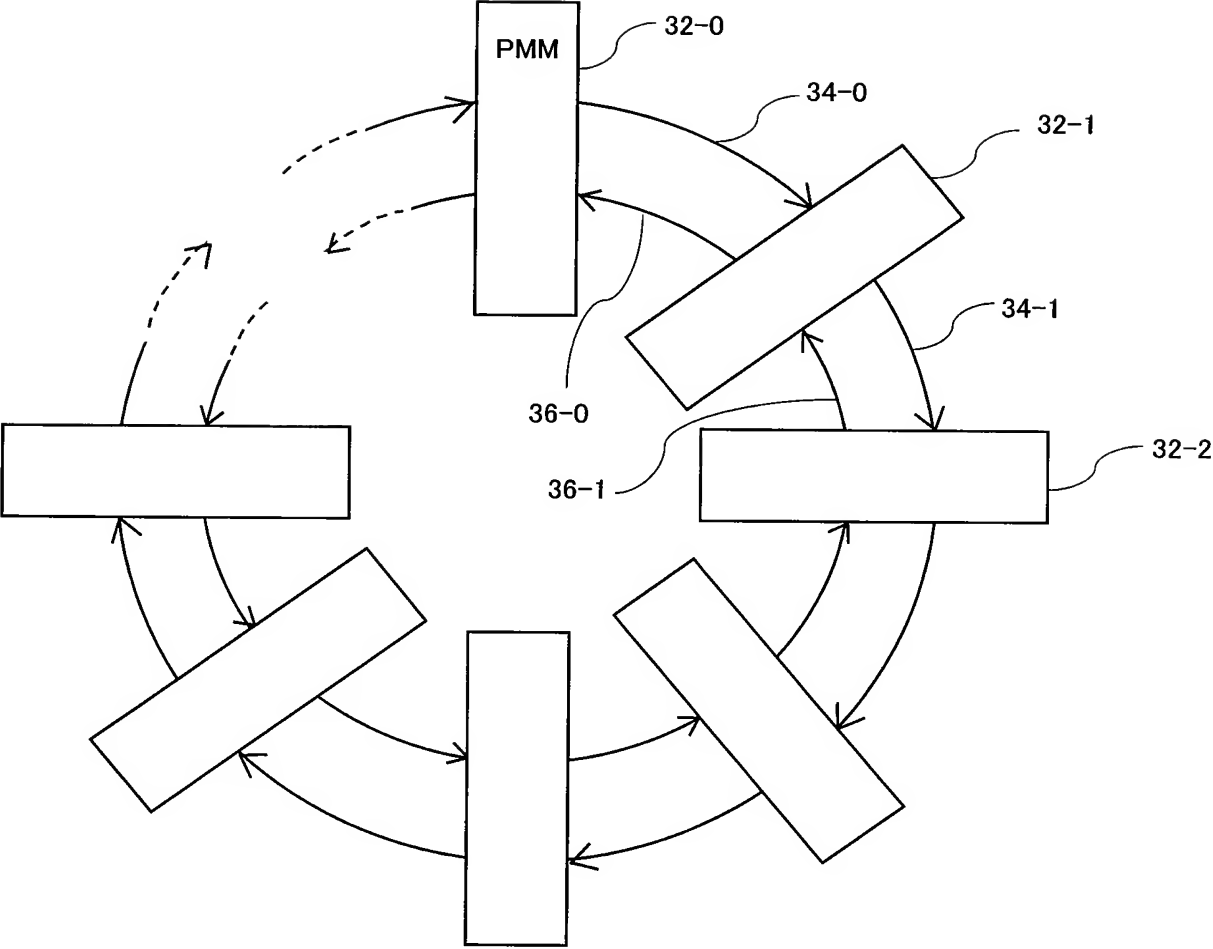


Fig.4

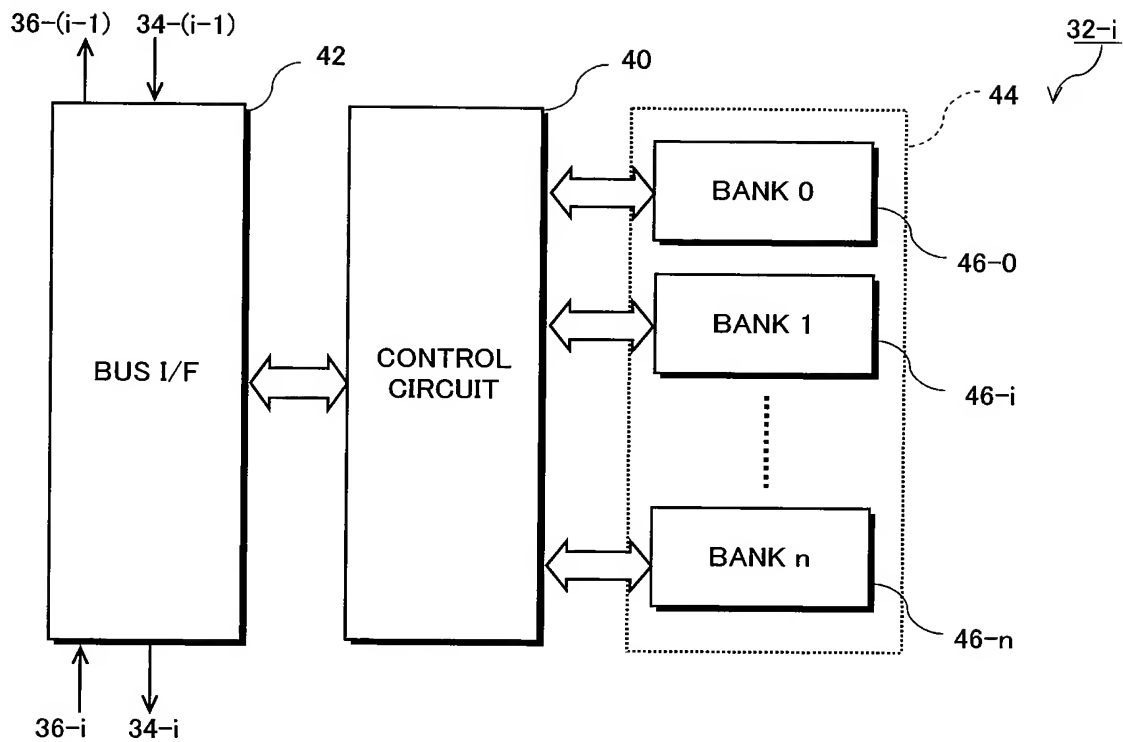


Fig.5

RECORD NUMBER	SEX	AGE	HEIGHT(cm)
0	FEMALE	3	78
1	MALE	1	82
2	FEMALE	2	69
3	FEMALE	1	82
4	MALE	3	91
5	FEMALE	1	76
6	FEMALE	1	78
7	FEMALE	2	84
8	MALE	3	87
9	FEMALE	3	80

Fig.6

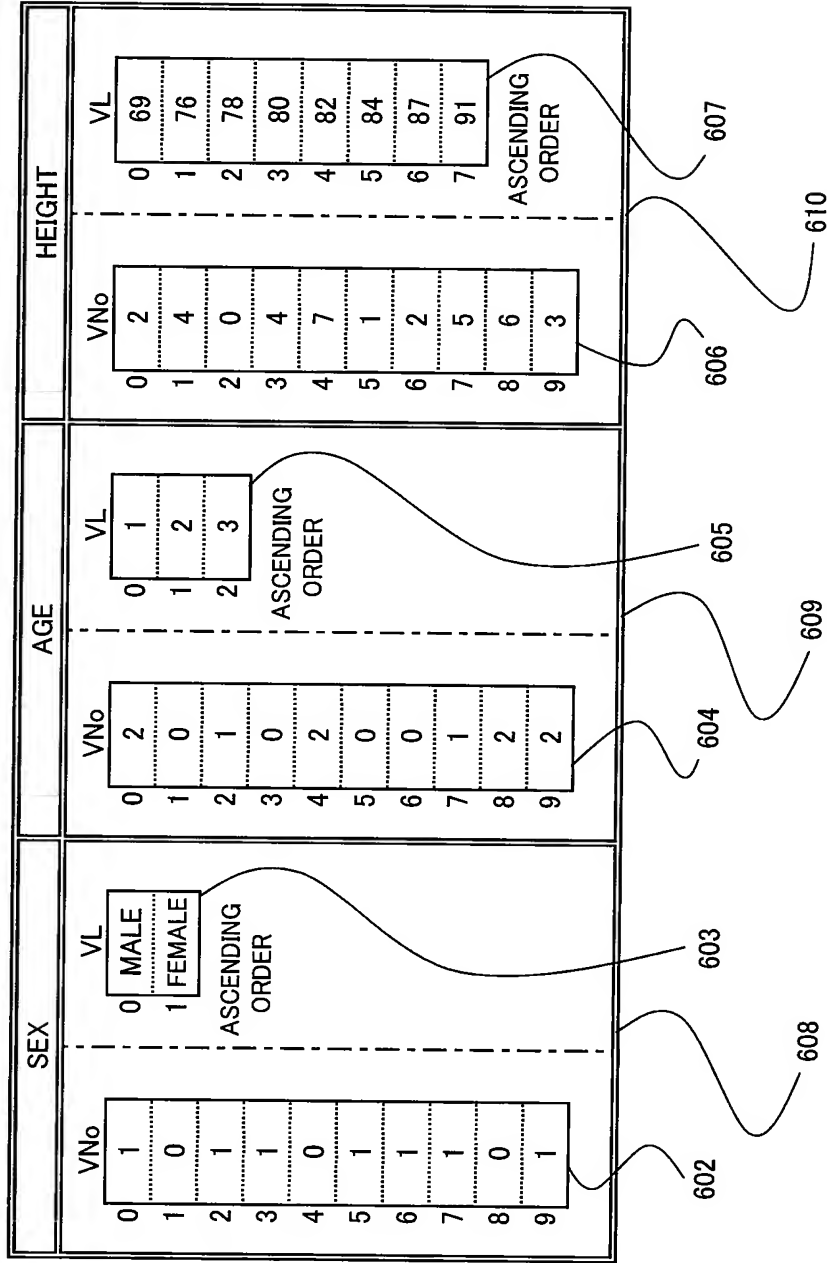


Fig.8

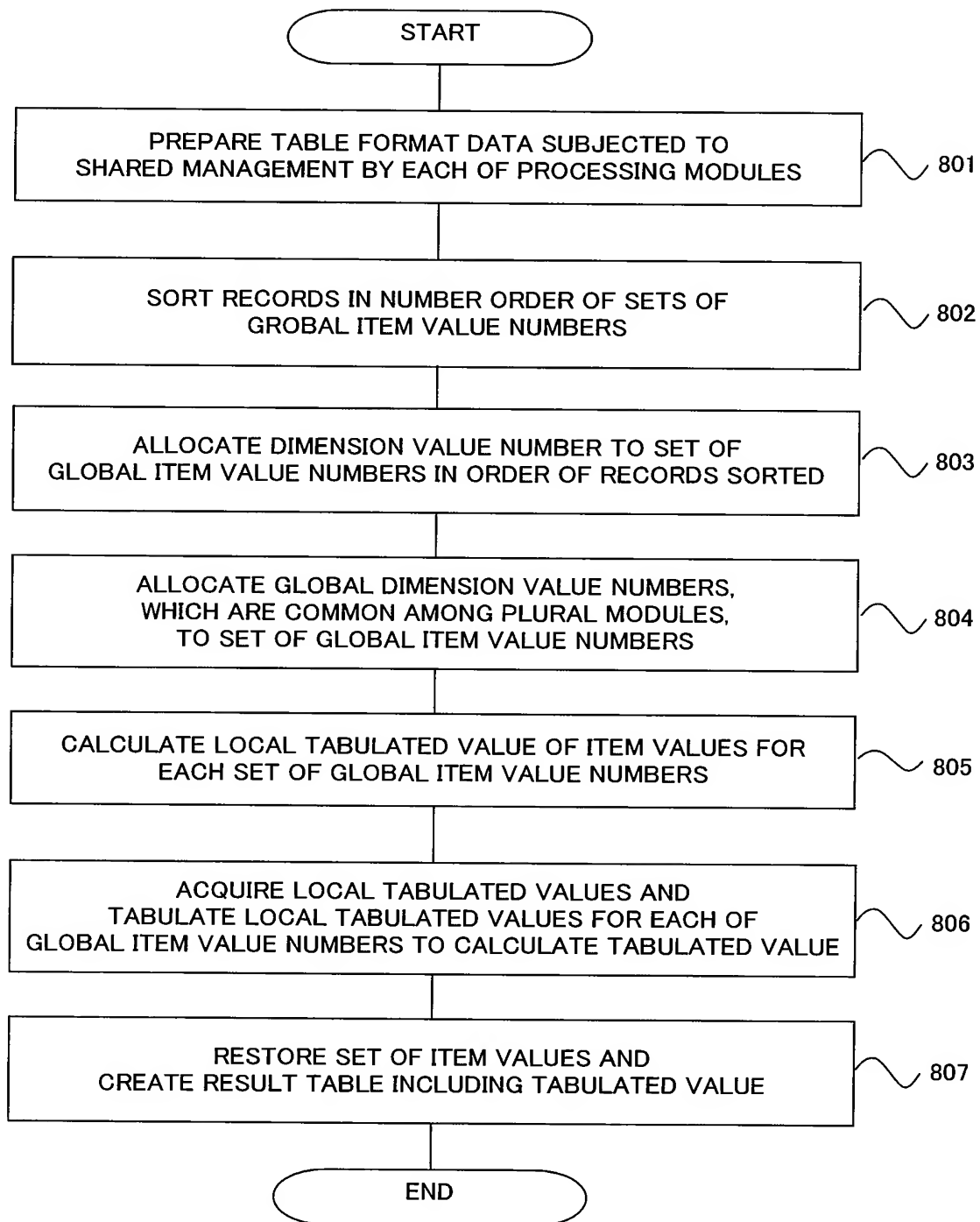


Fig.9

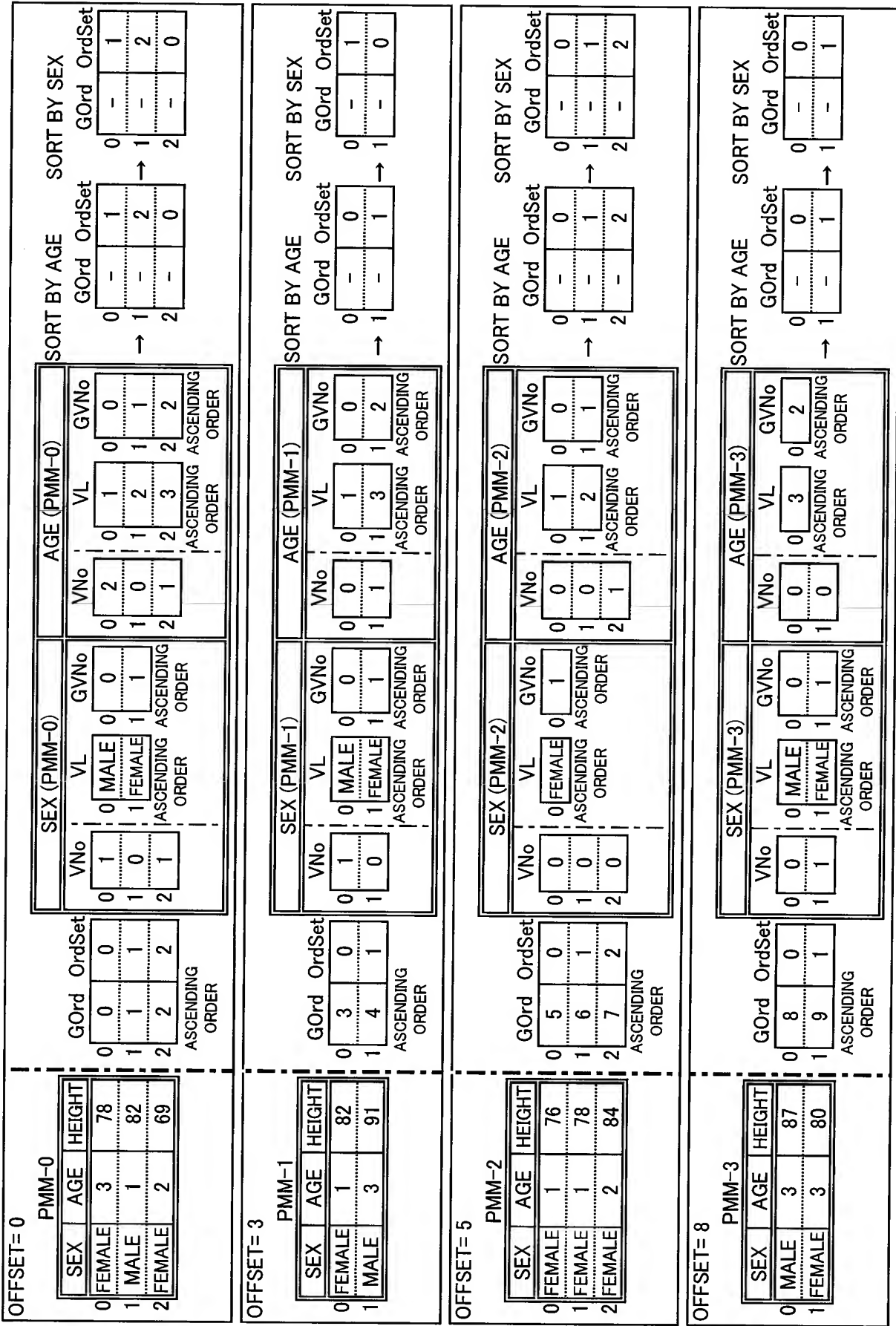


Fig.10

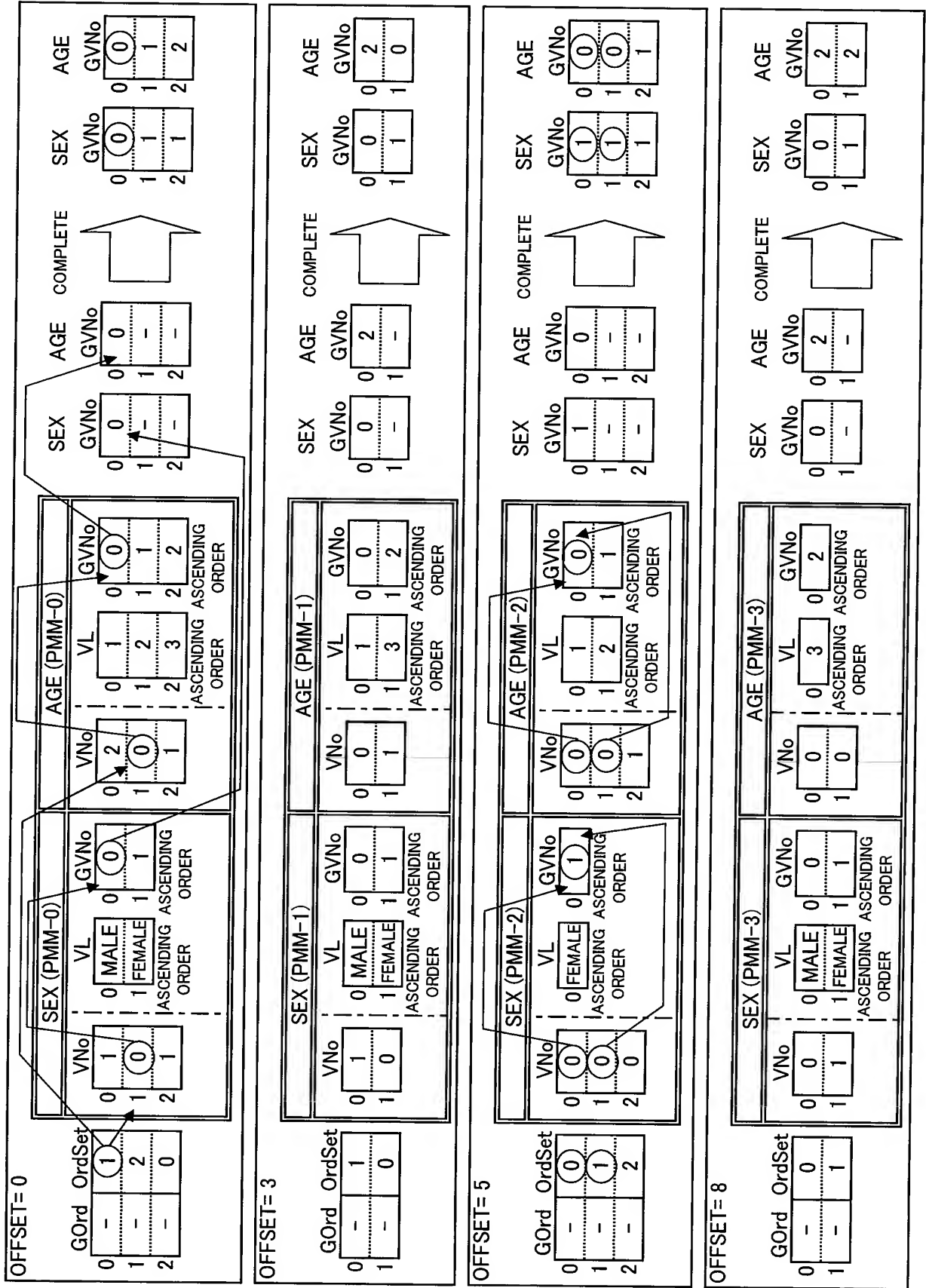


Fig.11

CREATE LOCAL DIMENSION VALUE NUMBER LDimNo
(ORDERING OF DIMENSIONS IN LOCAL)

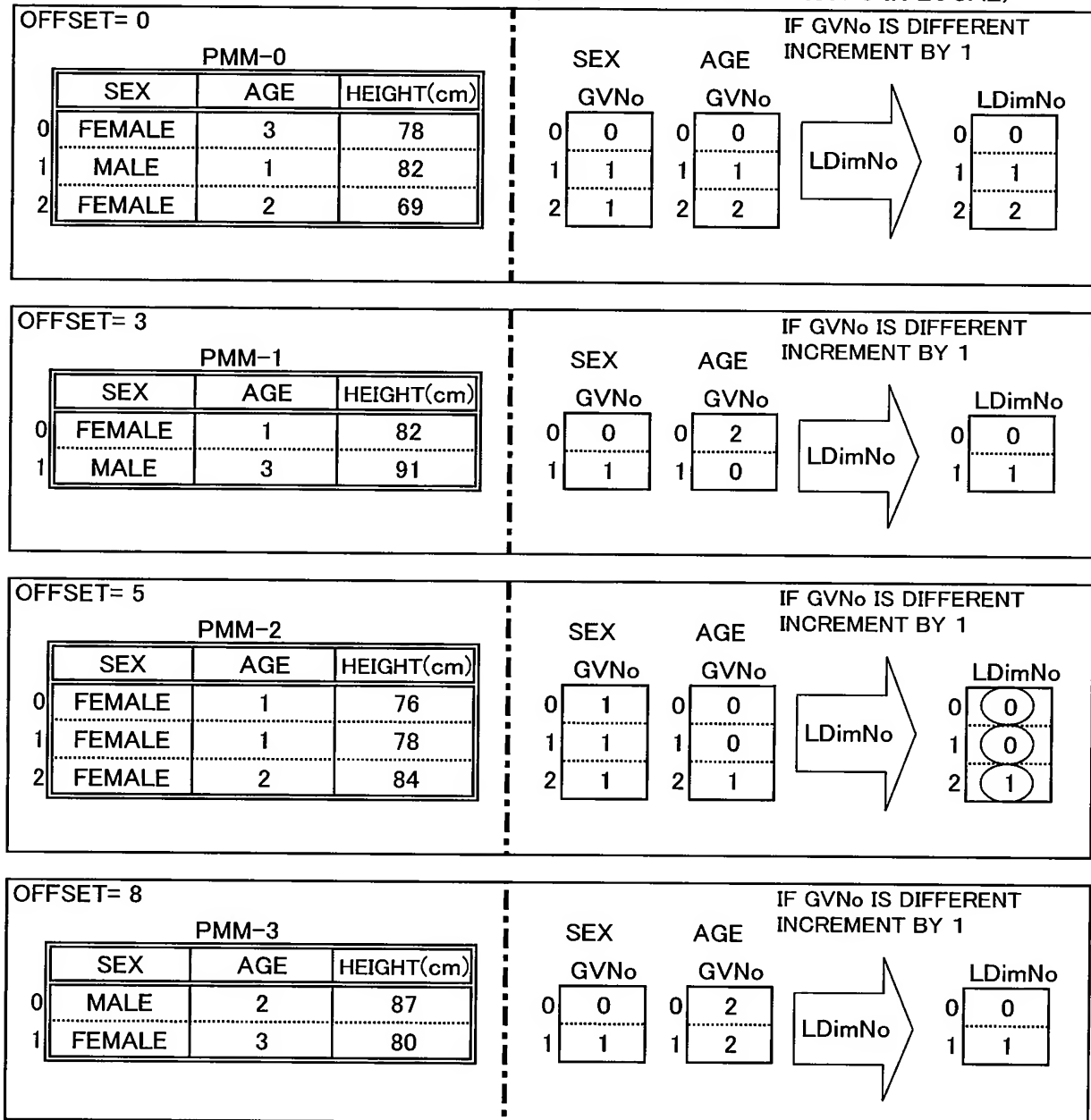


Fig.12

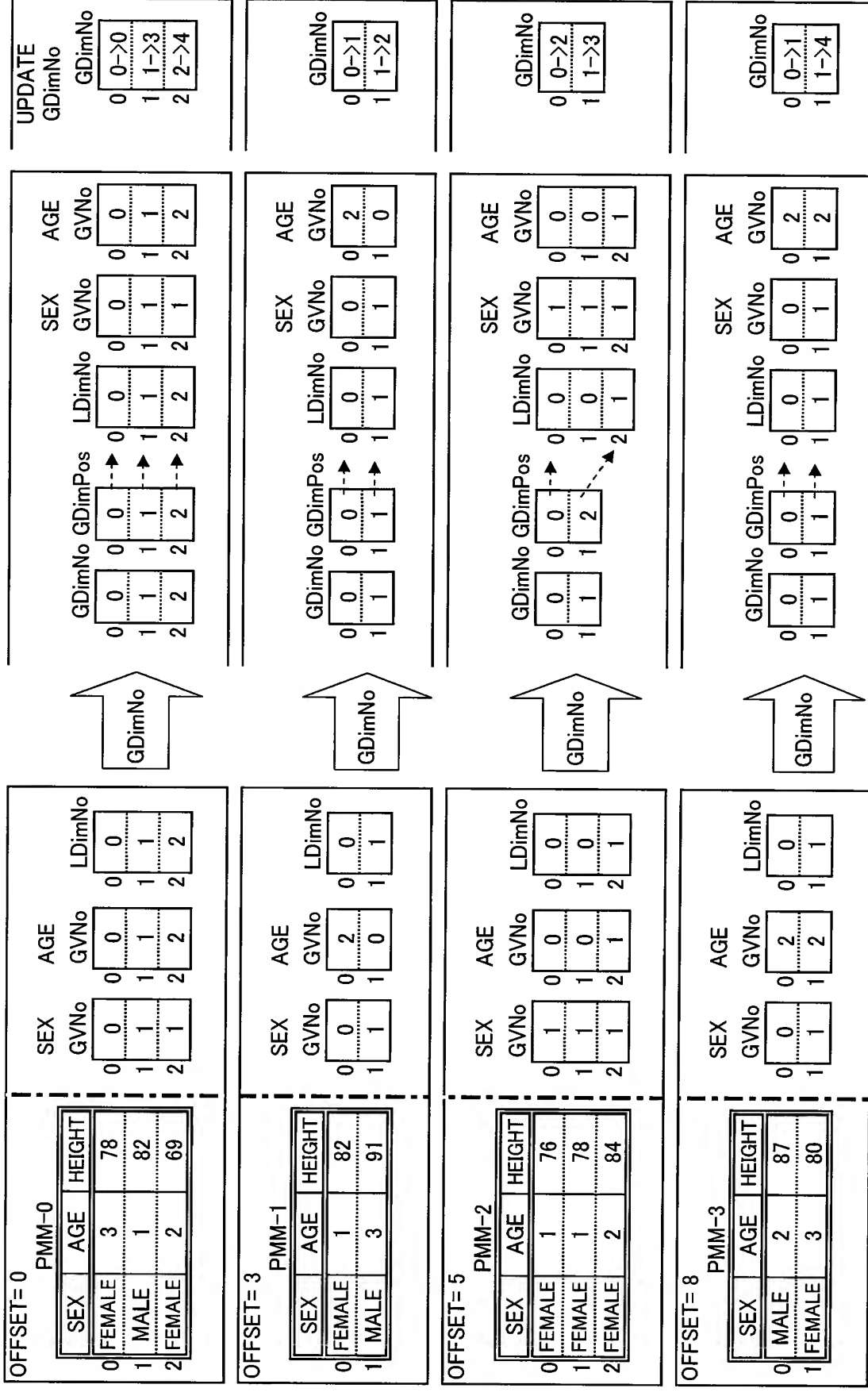


Fig.13

	LDimNo	GNo1	GNo2	GDimNo
PMM-0	0	0	0	0
	1	1	1	3
	2	1	2	4
PMM-1	0	0	2	1
	1	1	0	2
PMM-2	0	1	0	2
	1	1	1	3
PMM-3	0	0	2	1
	1	1	1	2

Fig.14

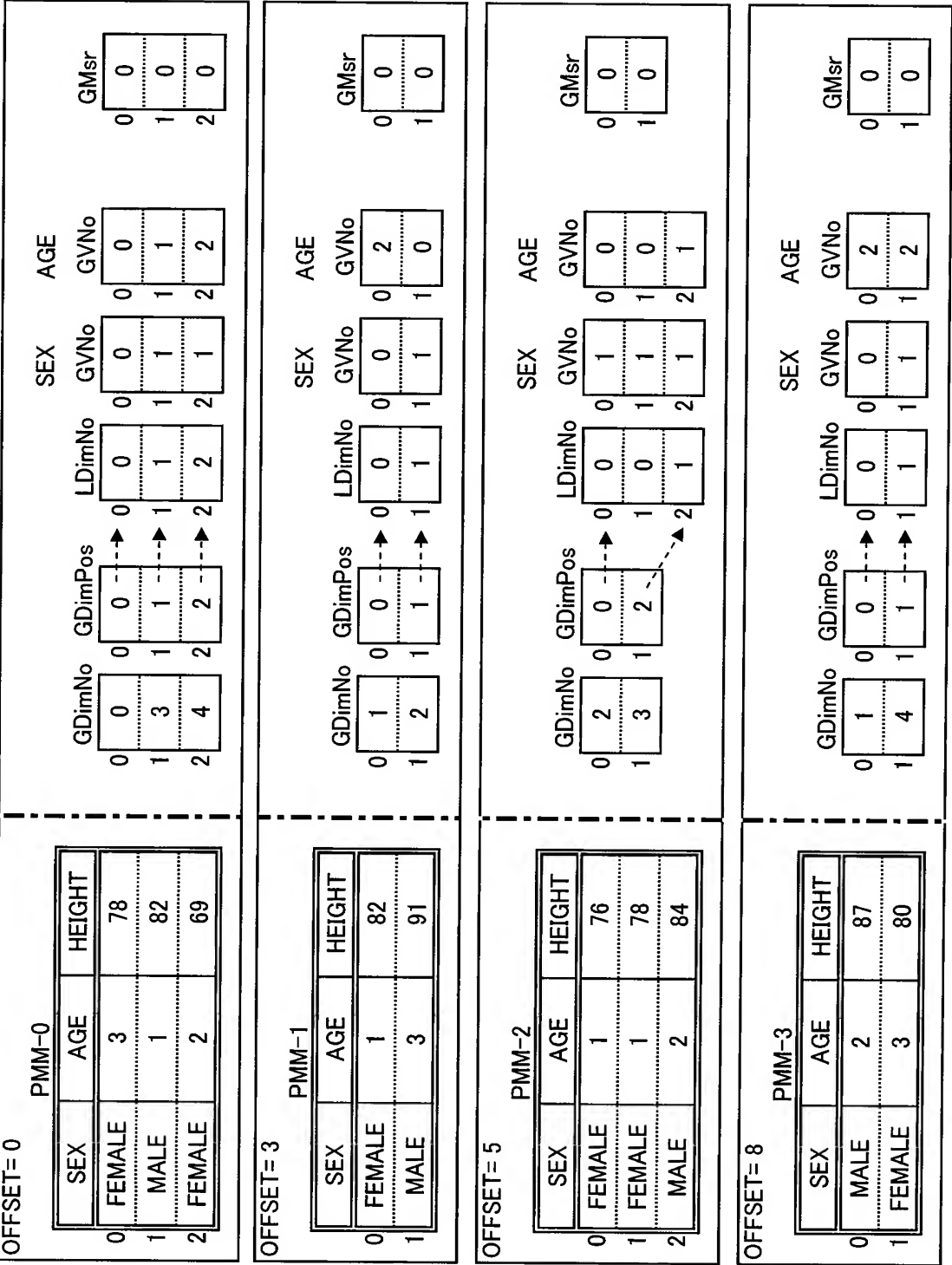


Fig.15

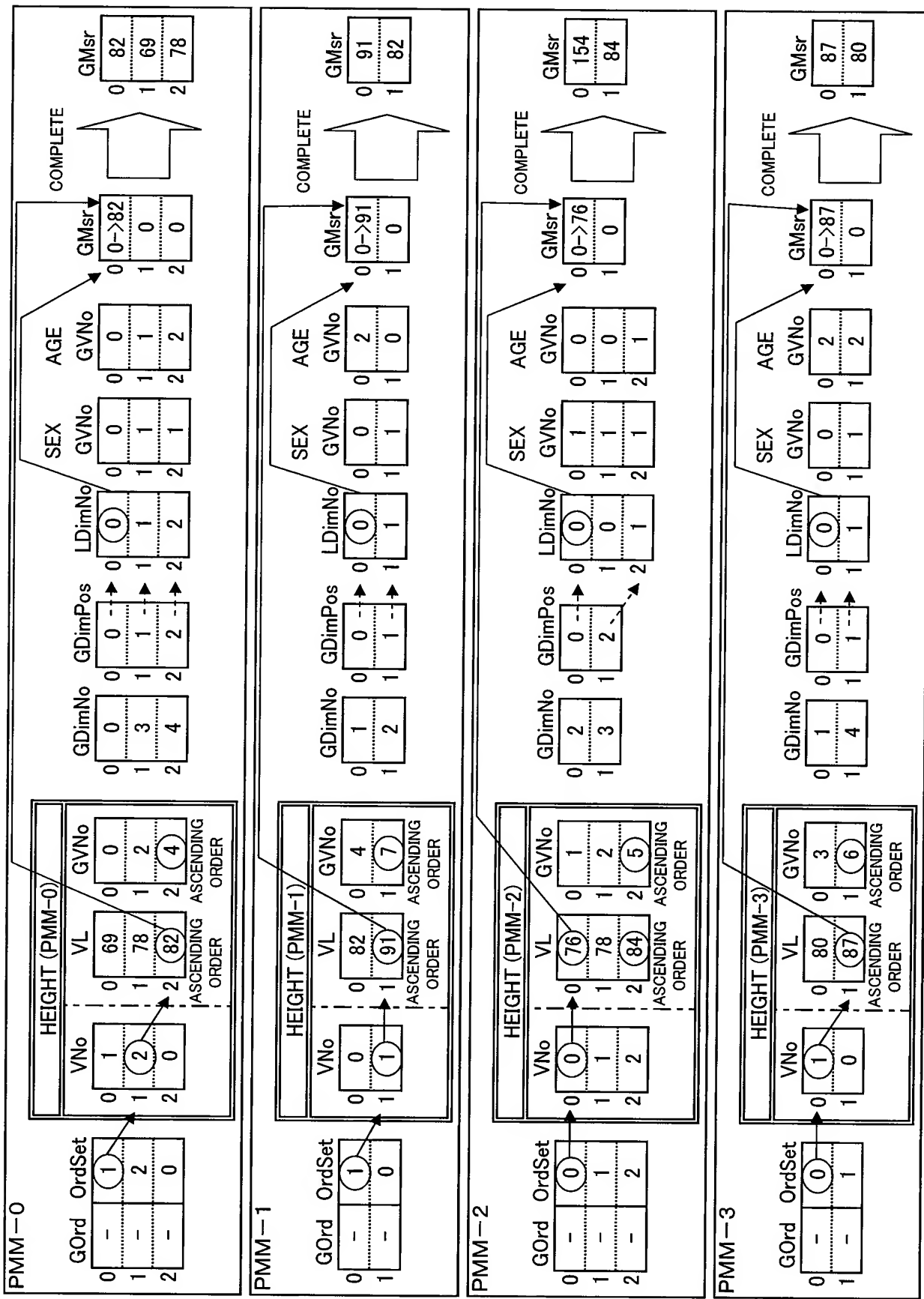


Fig.16

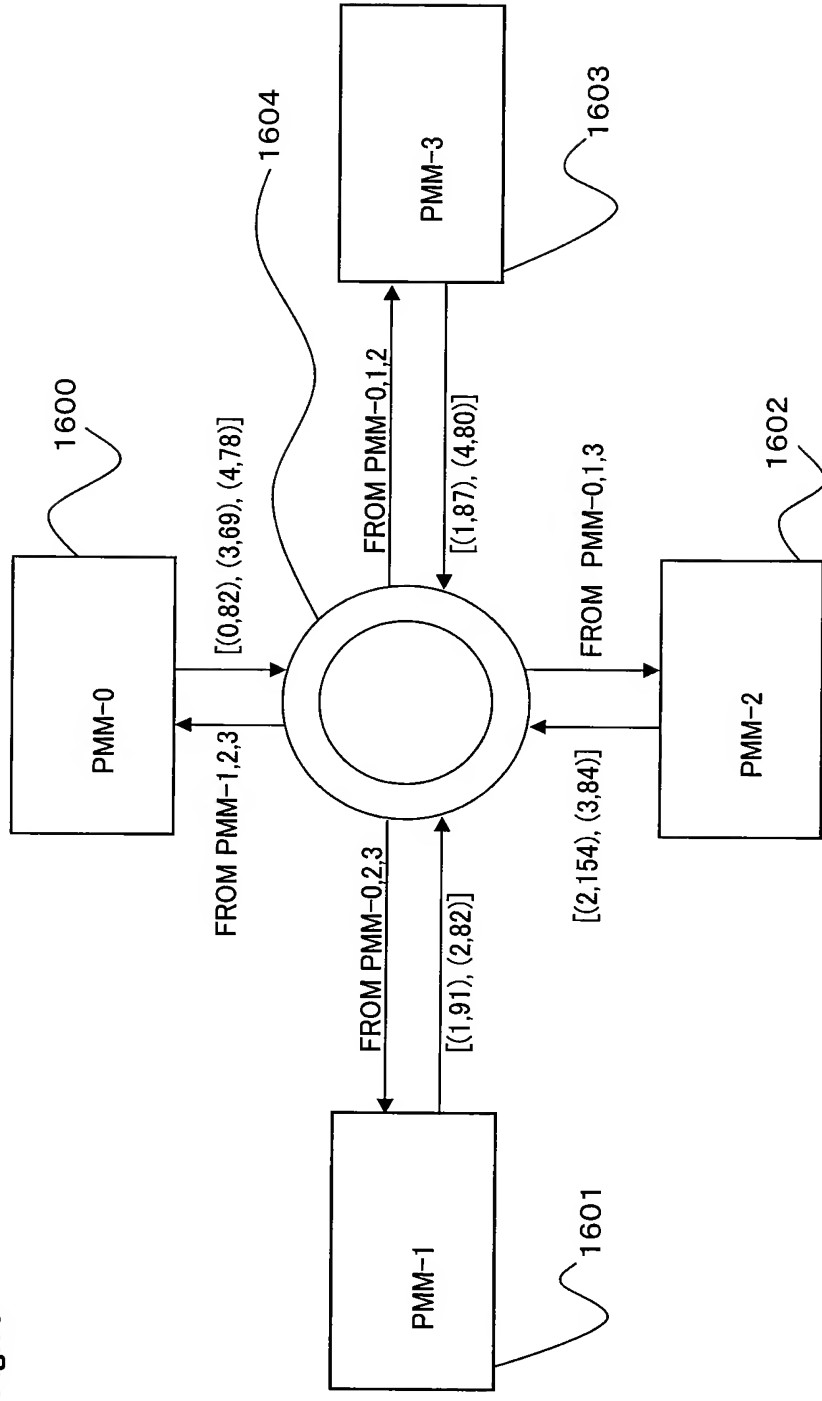


Fig.17

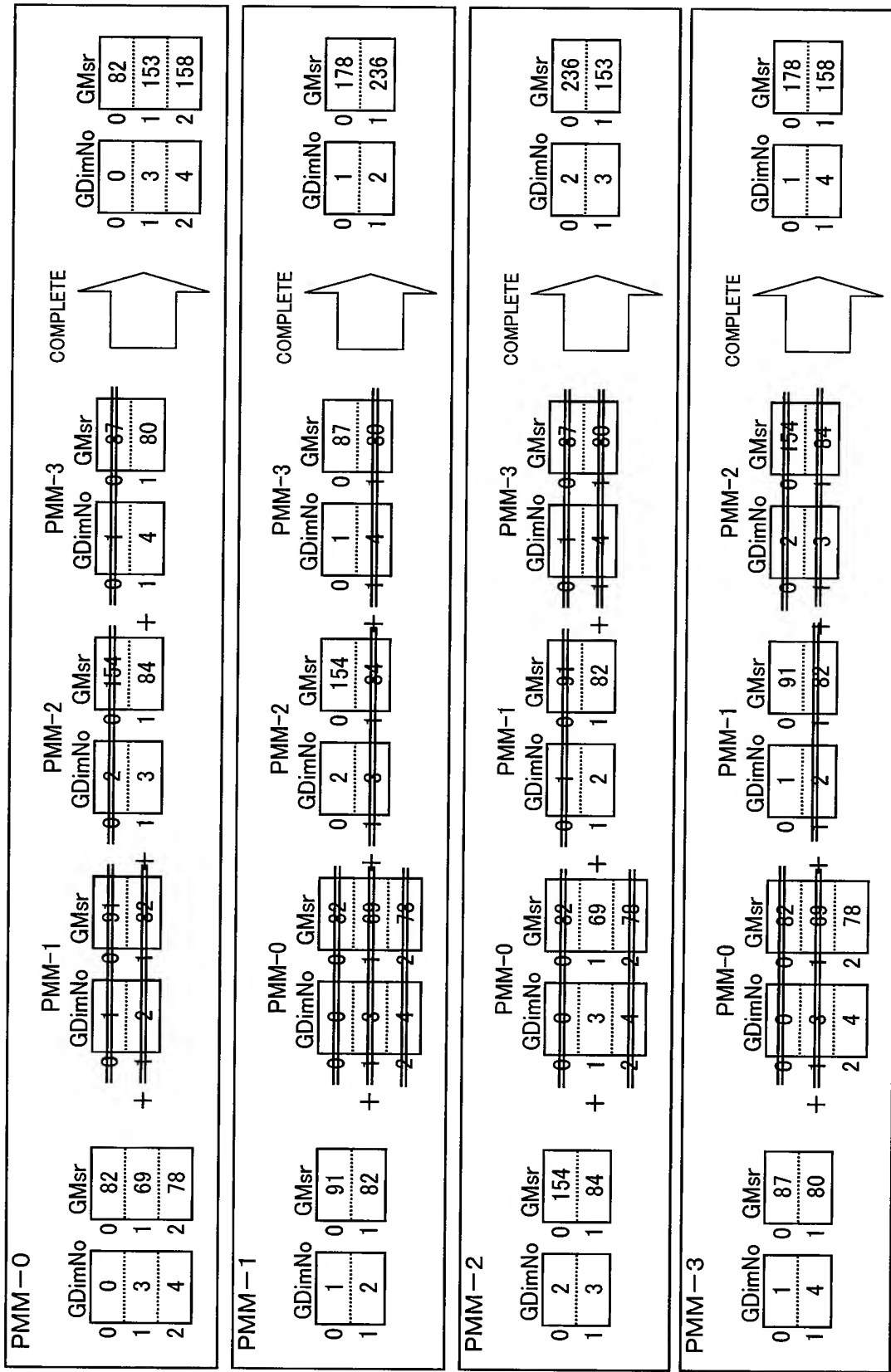
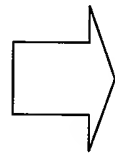


Fig.18

PMM-0

	GDimNo		GMsr
0	0	0	82
1	3	1	153
2	4	2	158

COMPLETE

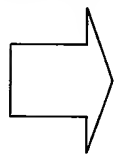


	GDimNo		GMsr
0	0	0	82
1	3	1	153
2	4	2	158

PMM-1

	GDimNo		GMsr
0	1	0	178
1	2	1	236

COMPLETE

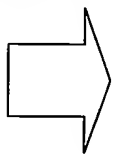


	GDimNo		GMsr
0	1	0	178
1	2	1	236

PMM-2

	GDimNo		GMsr
0	2	0	236
1	3	1	153

COMPLETE

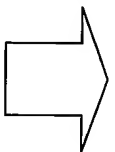


	GDimNo		GMsr
0	2	0	236
1	3	1	153

PMM-3

	GDimNo		GMsr
0	1	0	178
1	4	1	158

COMPLETE



	GDimNo		GMsr
0	1	0	178
1	4	1	158

Fig.20

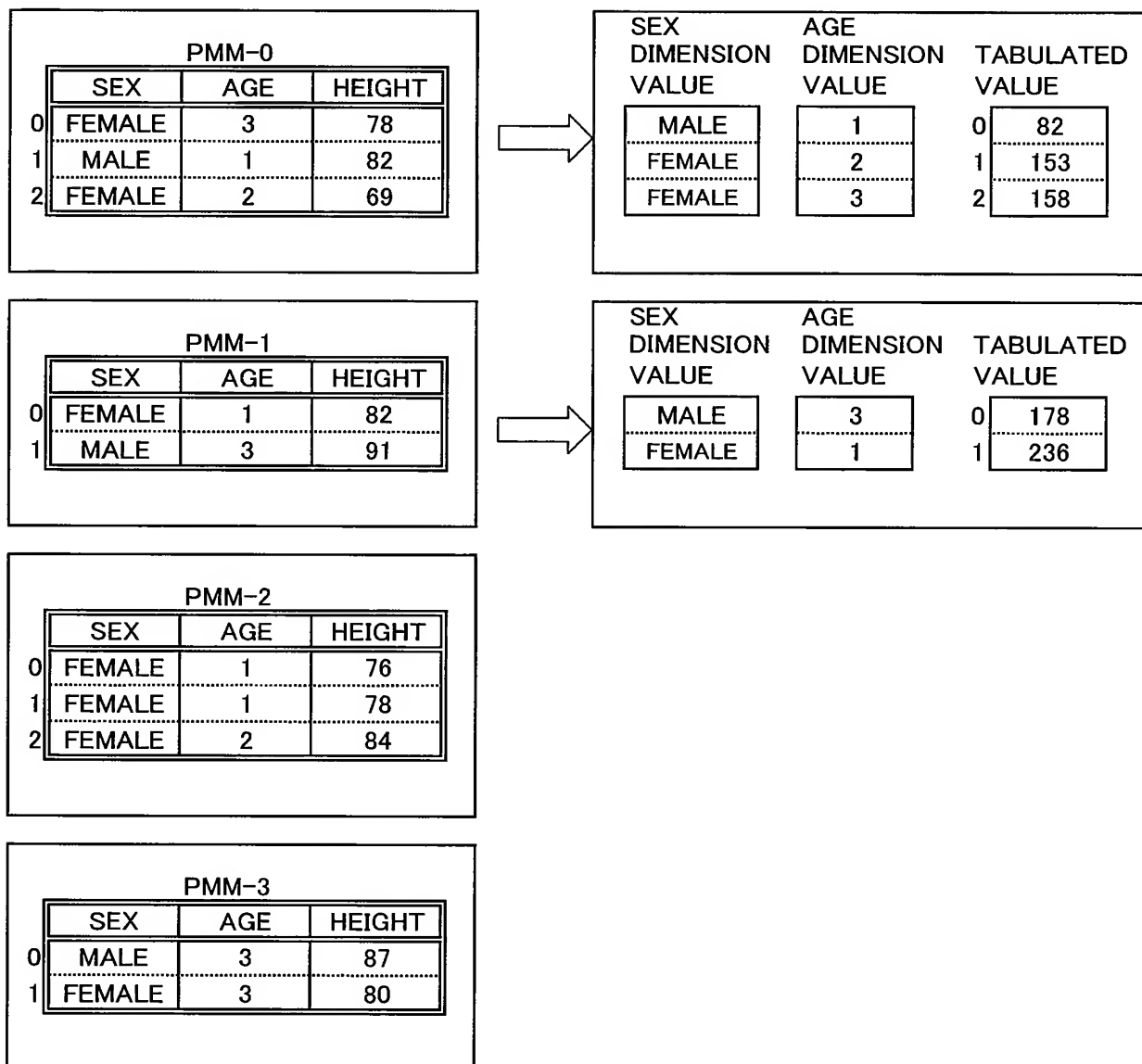


Fig.21

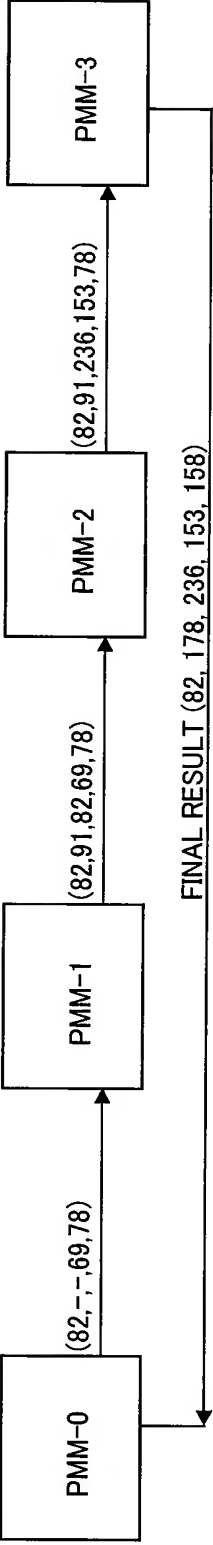


Fig.22

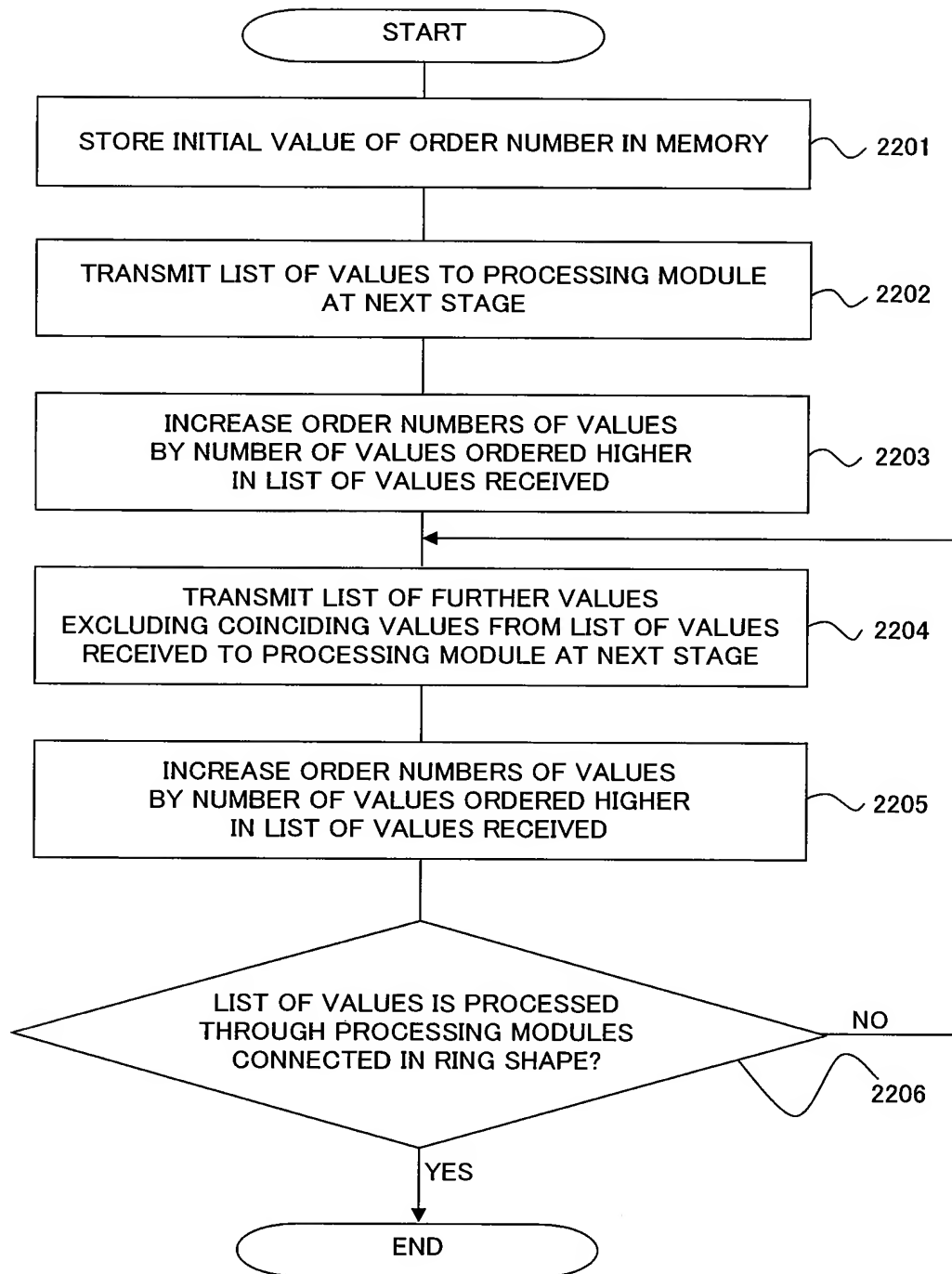


Fig.23A

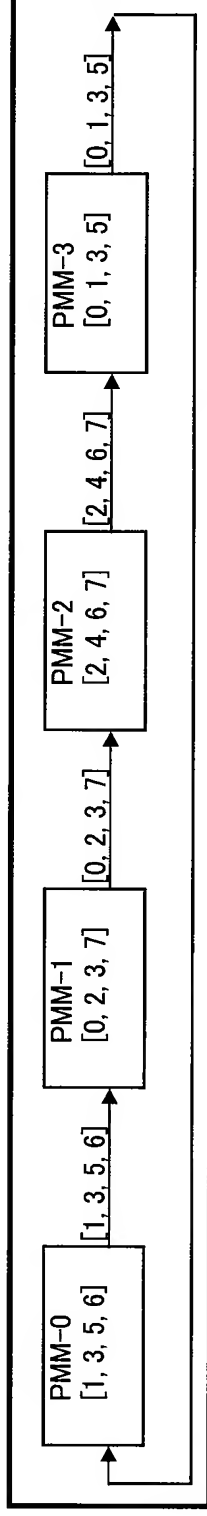


Fig.23B

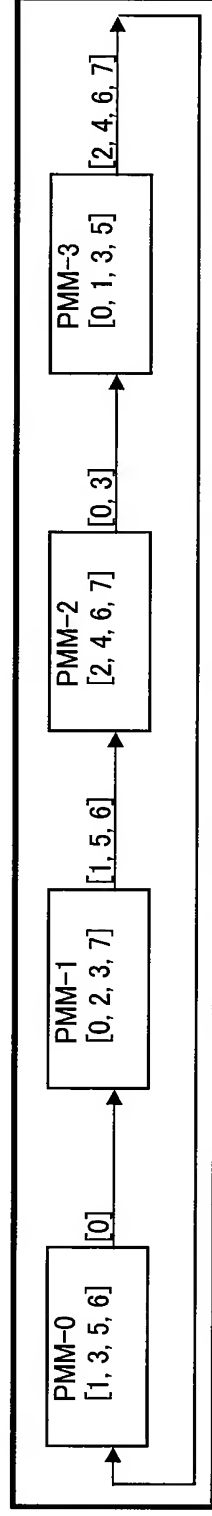


Fig.23C

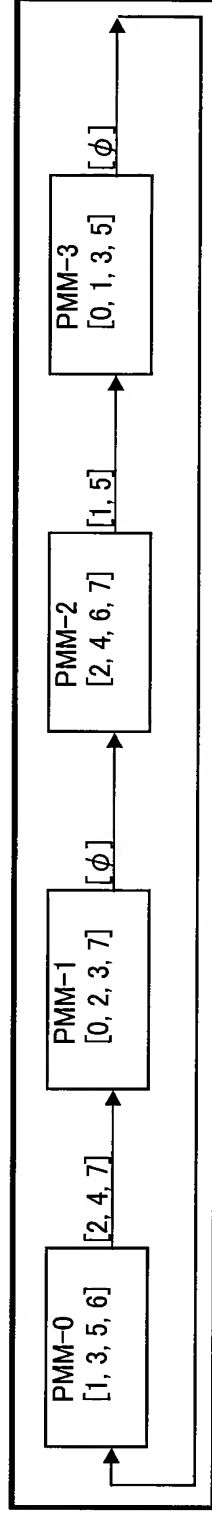


Fig.23D

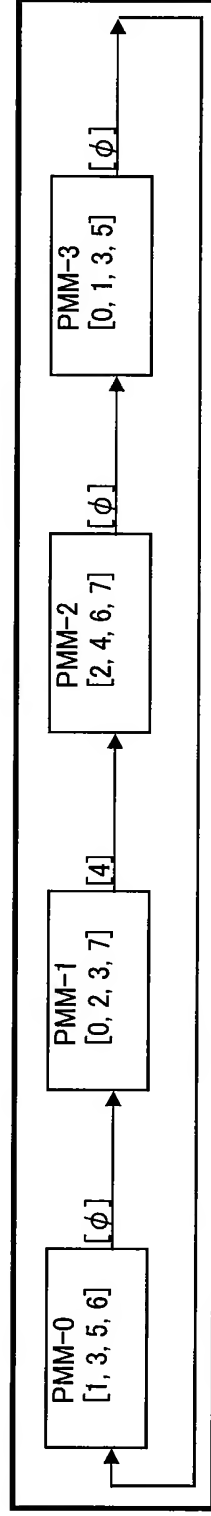


Fig.24A

RECEIVED LIST			
PMM-0	PMM-1	PMM-2	PMM-3
[0, 1, 3, 5]	[1, 3, 5, 6]	[0, 2, 3, 7]	[2, 4, 6, 7]

STEP1

Fig.24B

RECEIVED LIST			
PMM-0	PMM-1	PMM-2	PMM-3
[0, 1, 3, 5] [2, 4, 6, 7]	[1, 3, 5, 6] [0]	[0, 2, 3, 7] [1, 5, 6]	[2, 4, 6, 7] [0, 3]

STEP2

Fig.24C

RECEIVED LIST			
PMM-0	PMM-1	PMM-2	PMM-3
[0, 1, 3, 5] [2, 4, 6, 7] [ϕ]	[1, 3, 5, 6] [0] [2, 4, 7]	[0, 2, 3, 7] [1, 5, 6] [ϕ]	[2, 4, 6, 7] [0, 3] [1, 5]

STEP3

Fig.24D

RECEIVED LIST			
PMM-0	PMM-1	PMM-2	PMM-3
[0, 1, 3, 5] [2, 4, 6, 7] [ϕ] [ϕ]	[1, 3, 5, 6] [0] [2, 4, 7] [ϕ]	[0, 2, 3, 7] [1, 5, 6] [ϕ] [4]	[2, 4, 6, 7] [0, 3] [1, 5] [ϕ]

STEP4

Fig.25

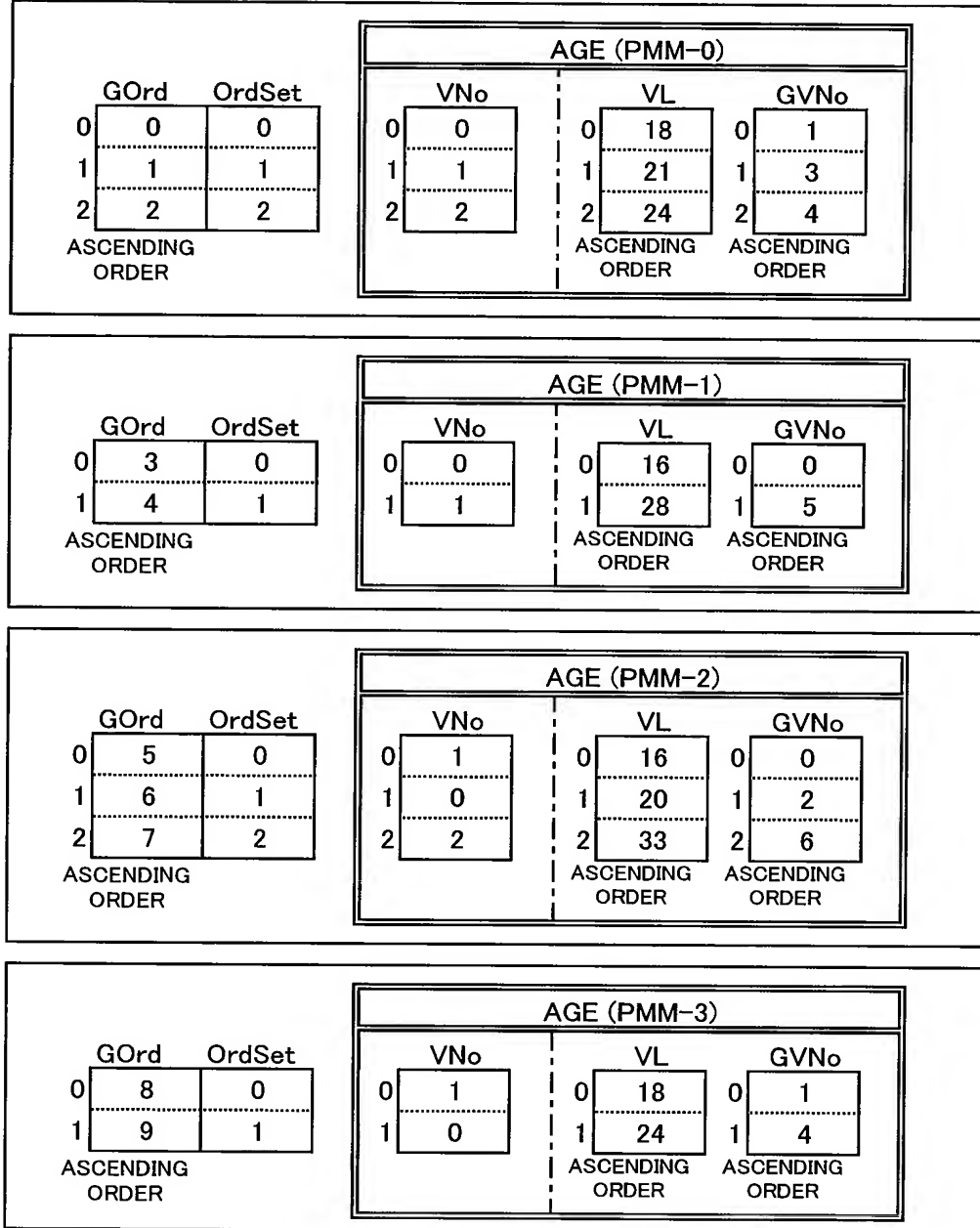


Fig.26

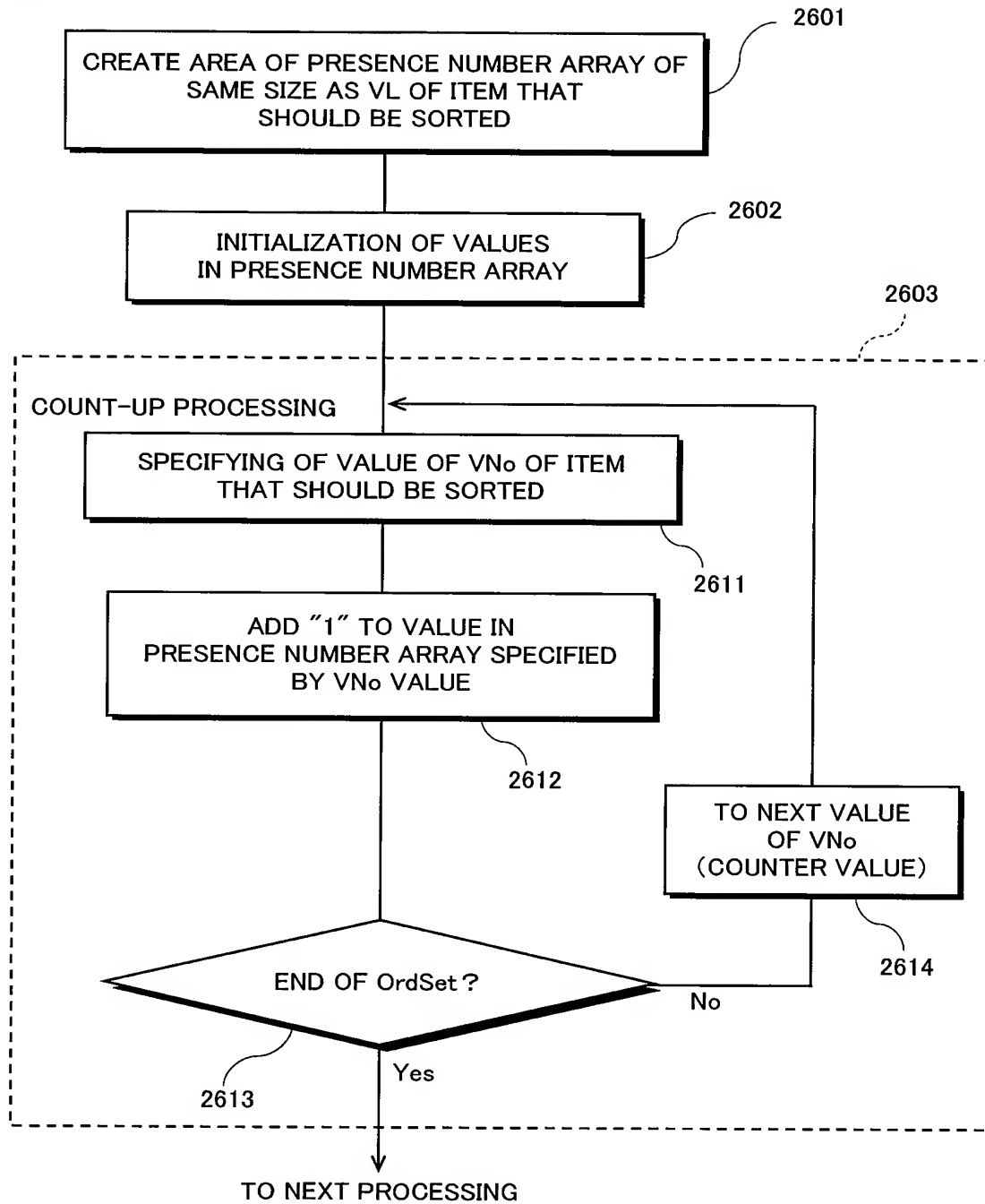


Fig.27

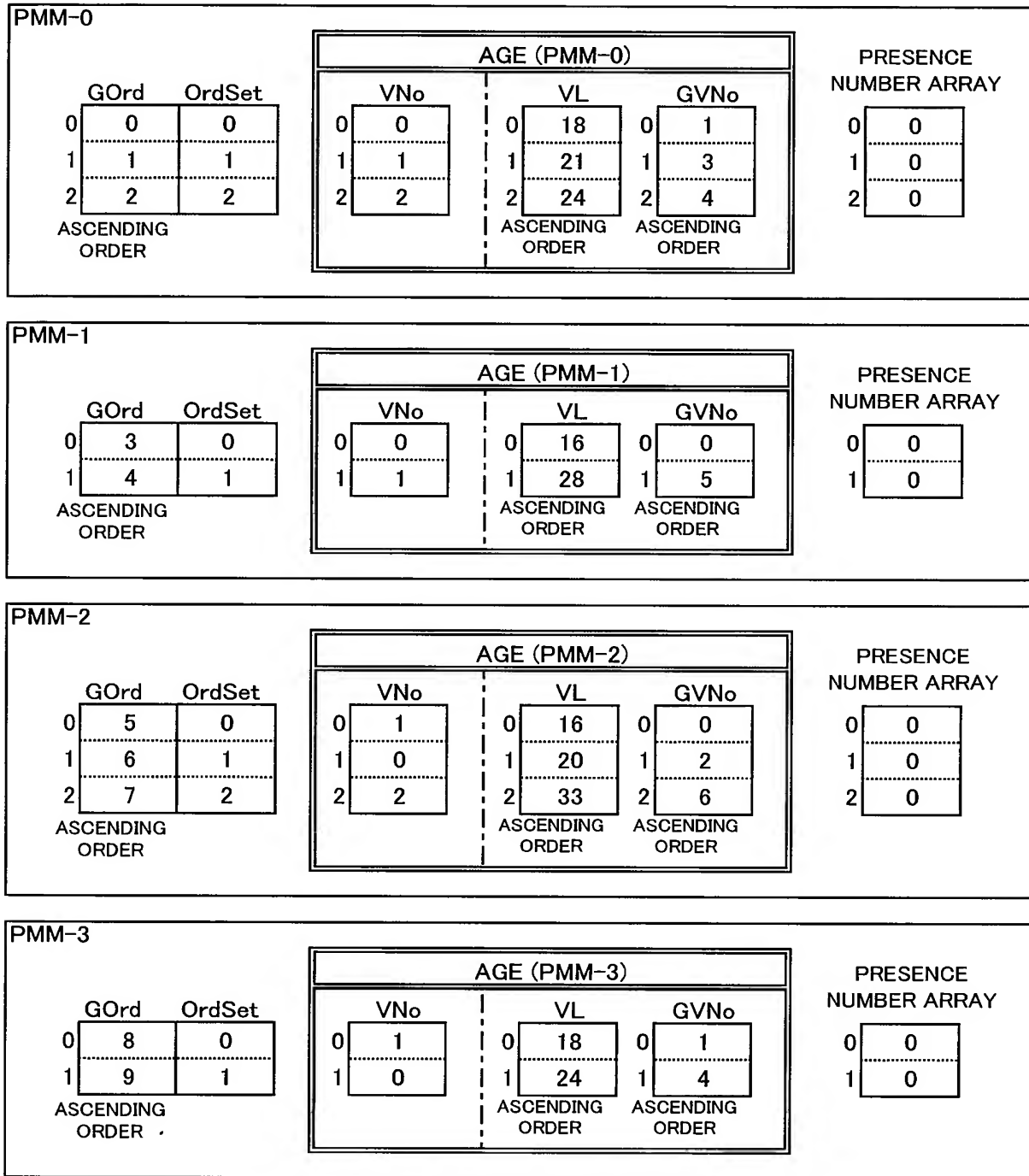


Fig.28

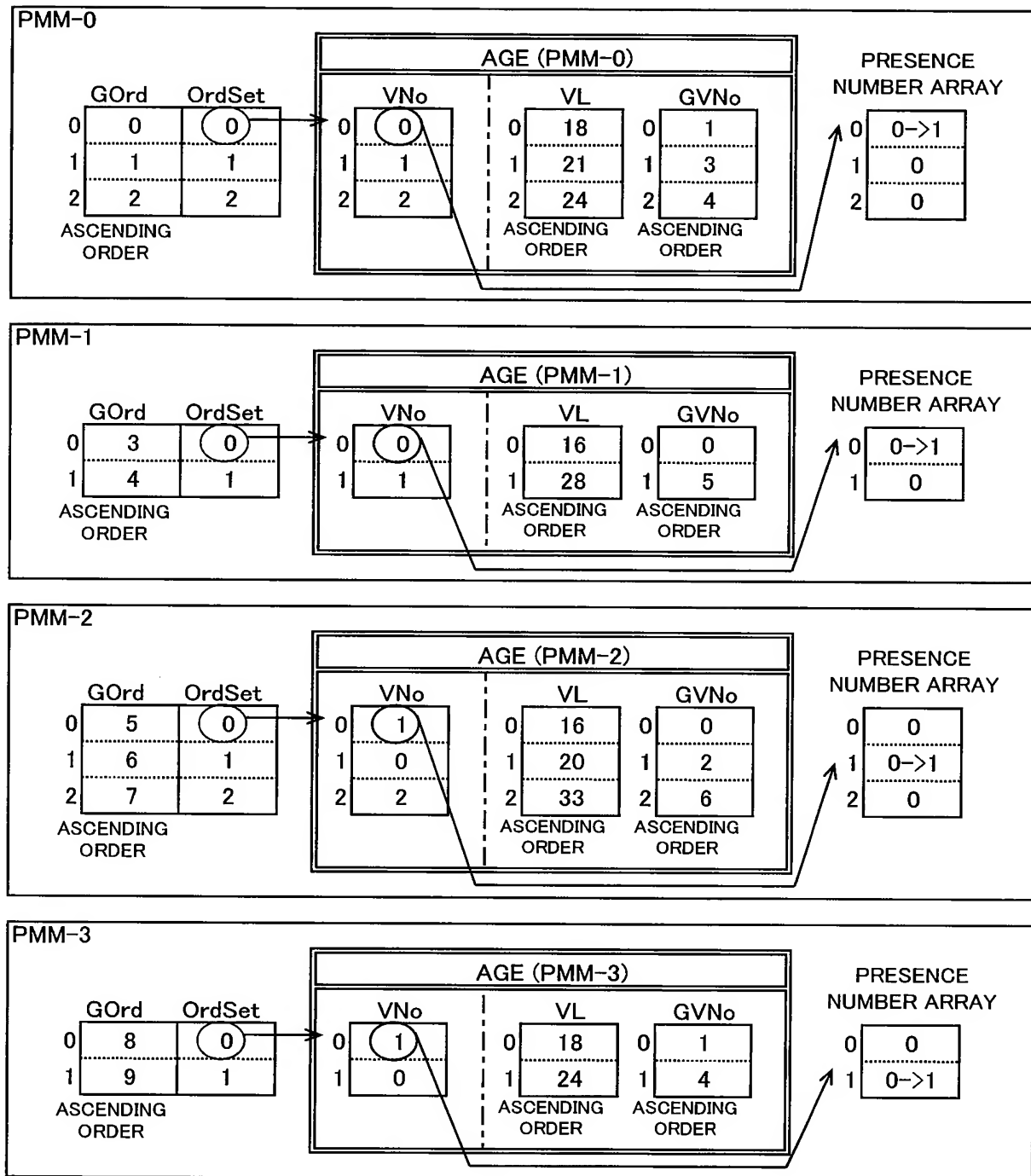


Fig.29

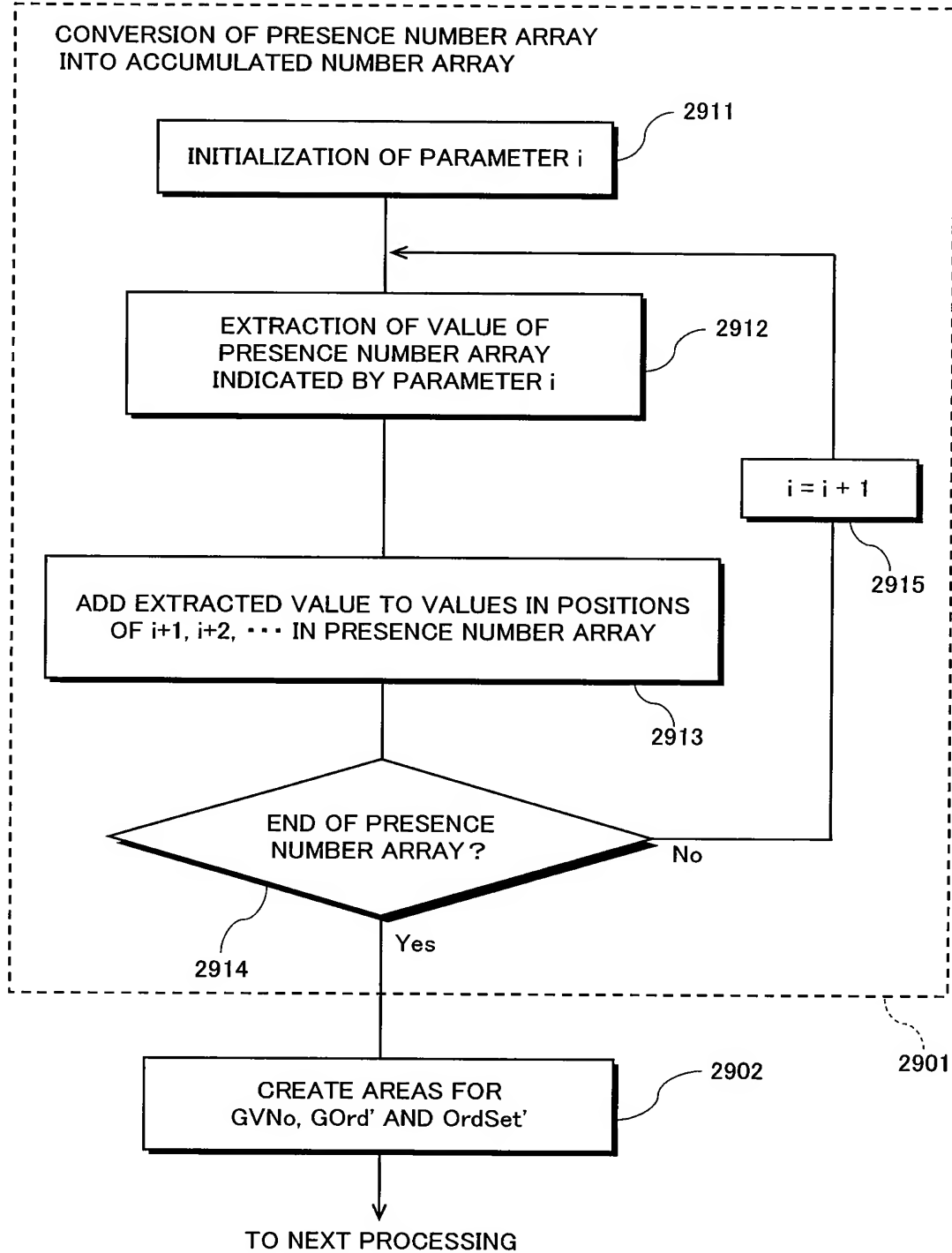


Fig.30

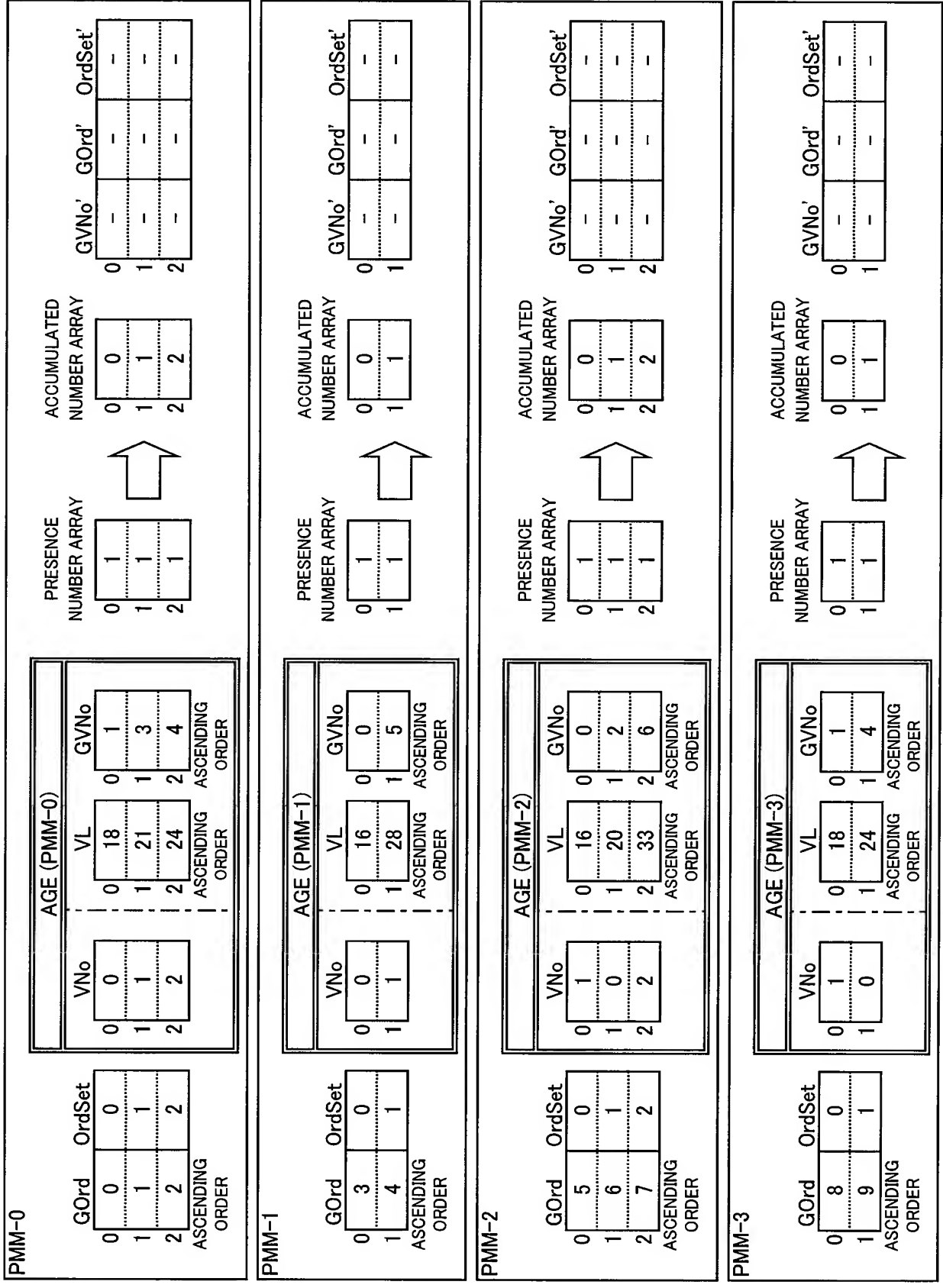


Fig.31

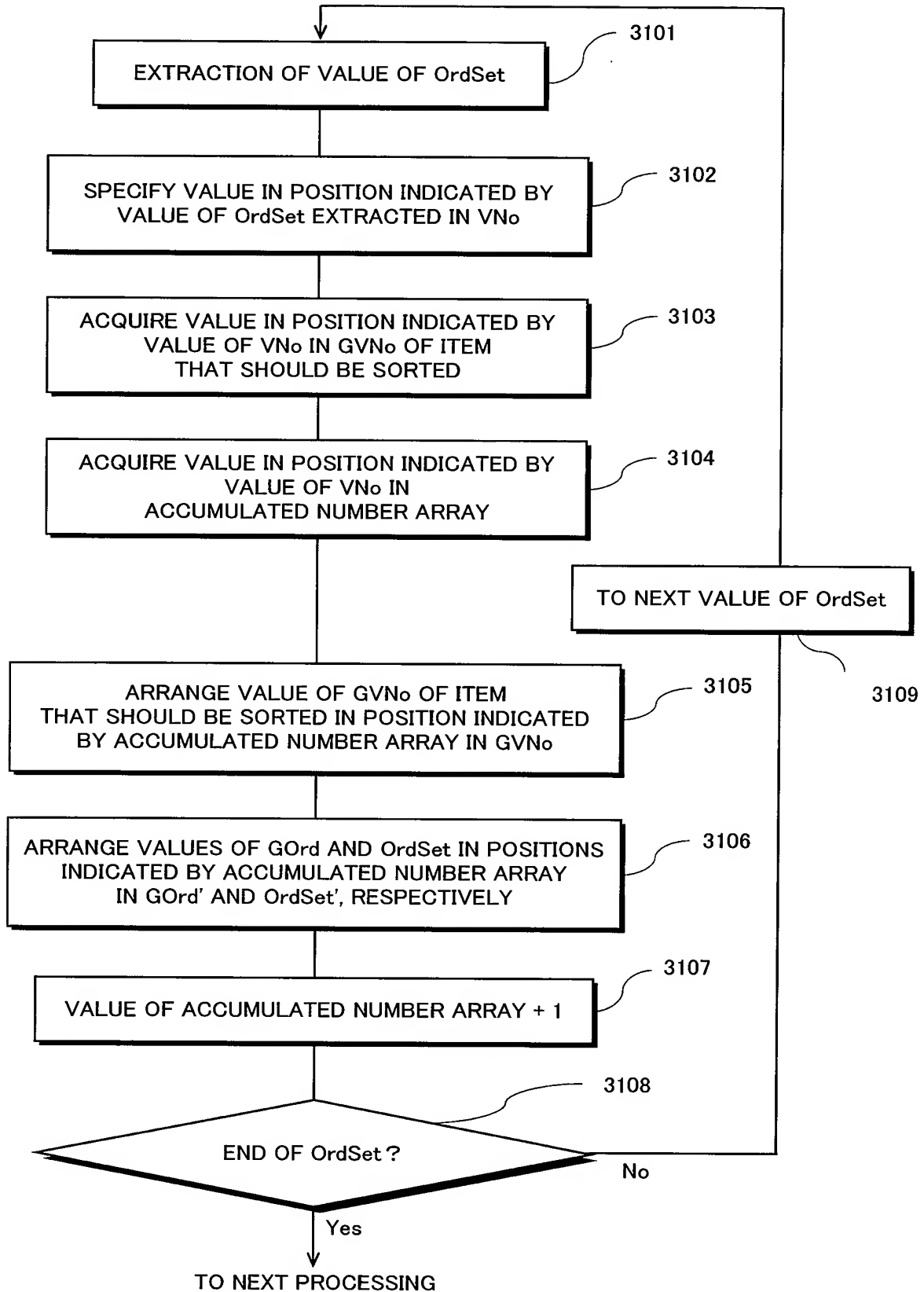


Fig.32

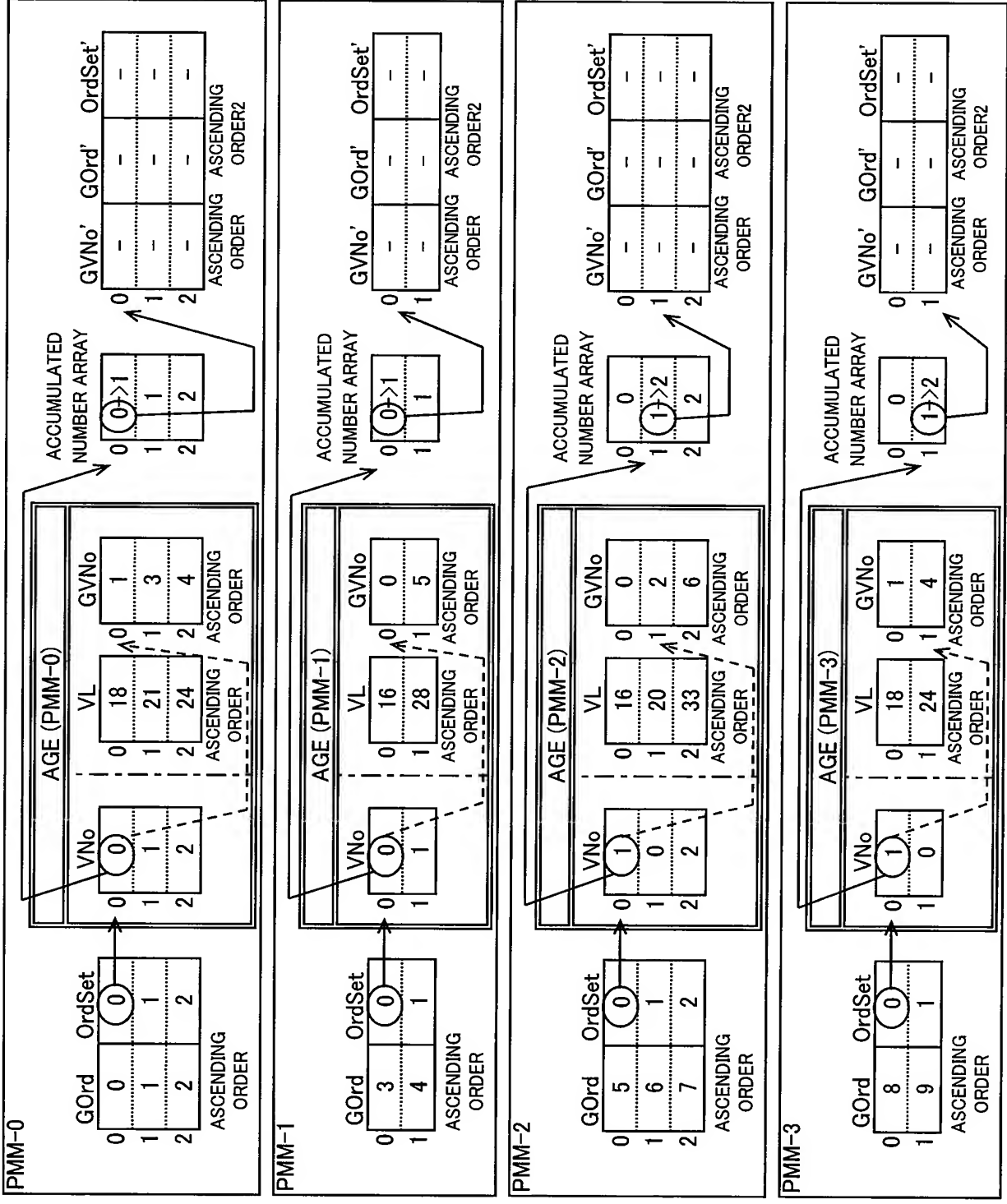


Fig.33

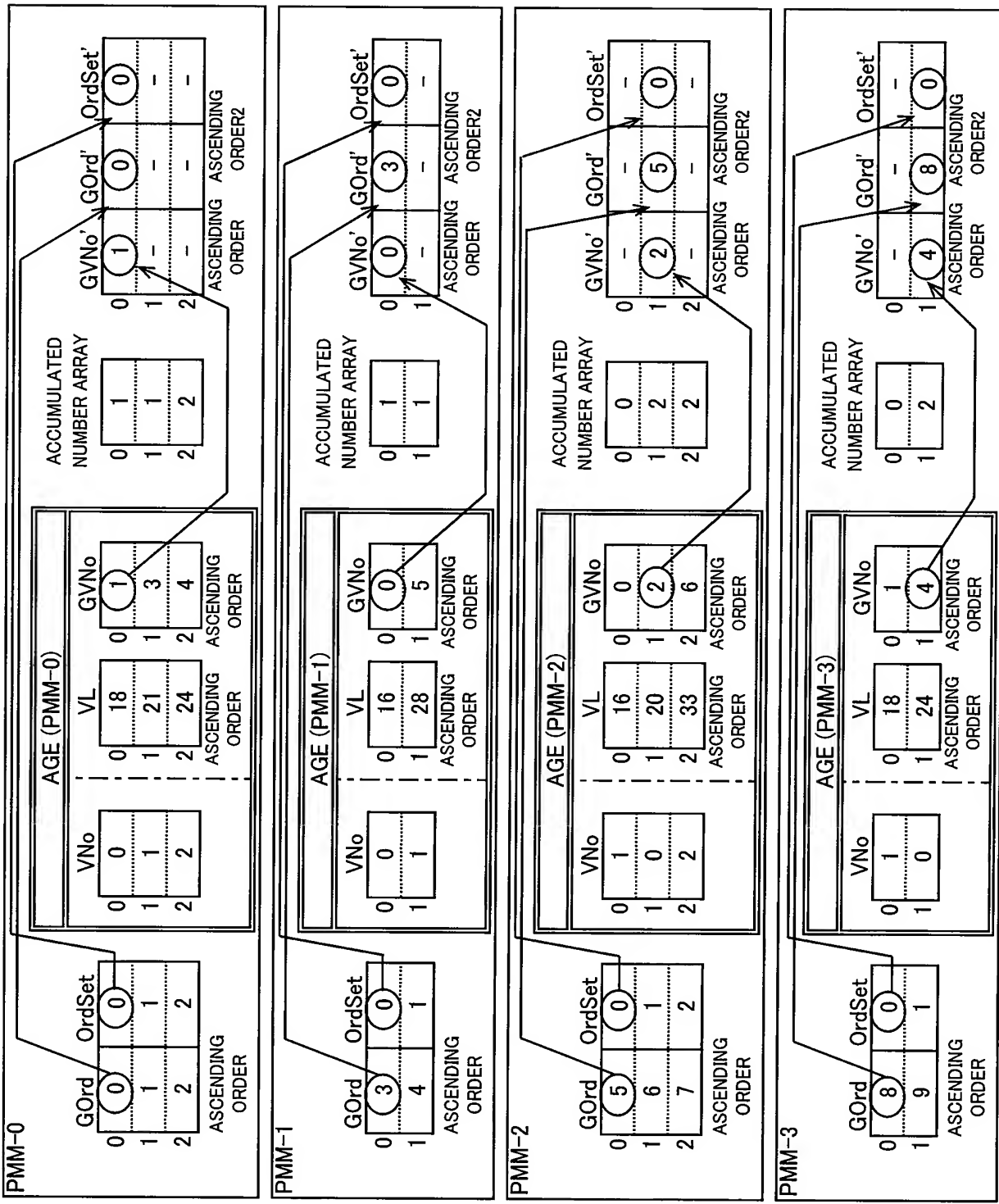


Fig.34

PMM-0						
ACCUMULATED NUMBER ARRAY						
<table><tr><td>0</td></tr><tr><td>1</td></tr><tr><td>2</td></tr></table>				0	1	2
0						
1						
2						
	GVNo'	GOrd'	OrdSet'			
0	1	0	0			
1	3	1	1			
2	4	2	2			
	ASCENDING ORDER	ASCENDING ORDER 2				

PMM-1			
ACCUMULATED NUMBER ARRAY			
	0		
	1		

	GVNo'	GOrd'	OrdSet'
0	0	3	0
1	5	4	1
	ASCENDING ORDER	ASCENDING ORDER 2	

PMM-2

ACCUMULATED
NUMBER ARRAY

0
1
2

	GVNo'	GOrd'	OrdSet'
0	0	6	1
1	2	5	0
2	6	7	2
	ASCENDING ORDER	ASCENDING ORDER 2	

PMM-3

ACCUMULATED
NUMBER ARRAY

0
1

	GVNo'	GOrd'	OrdSet'
0	1	9	1
1	4	8	0
	ASCENDING ORDER	ASCENDING ORDER 2	

Fig.35A

ARRAY CREATION

OrdSet	GVNo OF SEX	GVNo OF AGE	GOrd
0	1	2	0
1	0	0	1
2	1	1	2

Fig.35B

ORDER NUMBER INITIALIZATION

OrdSet	ORDER NUMBER
0	0
1	0
2	0

Fig.35C

ORDER NUMBER ALLOCATION 1

OrdSet	ORDER NUMBER
0	0→1
1	0
2	0→1

Fig.35D

ORDER NUMBER ALLOCATION 2

OrdSet	ORDER NUMBER
0	1→2
1	0
2	1

Fig.35E

RESULT

ORDER NUMBER	OrdSet	GVNo OF SEX	GVNo OF AGE	GOrd
2	0	1	2	0
0	1	0	0	1
1	2	1	1	2

Fig.35F

RESULT

ORDER NUMBER	OrdSet	GVNo OF SEX	GVNo OF AGE	GOrd
0	1	0	0	1
1	2	1	1	2
2	0	1	2	0